Hit List



Search Results - Record(s) 1 through 50 of 55 returned.

☐ 1. Document ID: US 20040068548 A1

Using default format because multiple data bases are involved.

L1: Entry 1 of 55

File: PGPB

Apr 8, 2004

PGPUB-DOCUMENT-NUMBER: 20040068548

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040068548 A1

TITLE: Apparatus and method of rewriting firmware

PUBLICATION-DATE: April 8, 2004

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Sugita, Takatoshi

Nagano-ken

JP

US-CL-CURRENT: 709/208

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | lma |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|-----------|-----|
| | | | | | | | | | | | | | |

☐ 2. Document ID: US 20040004734 A1

L1: Entry 2 of 55

File: PGPB

Jan 8, 2004

DOCUMENT-IDENTIFIER: US 20040004734 A1

TITLE: Apparatus and method for initiating a printing operation from a printer

Detail Description Paragraph:

[0019] The general purpose computer 20 includes a processor 21 capable of executing at least one program, such as application program 32. The computer also includes a print driver 33, which interfaces between the application program 32 (or the underlying operating system) and the printer 10. The driver 33 receives commands from the application program 32 (or operating system) and translates them to commands that the printer 10 "understands." The computer 20 also runs a printer status monitor program 34, which displays on the computer the status of the printer 10. The printer status monitor 34 receives information from the printer 10 identifying conditions such as "tray open," "paper jam" or "out of paper," and displays the printer status information on the monitor of the computer 20. In the exemplary embodiment, the printer status monitor 34 also is responsive to receipt of message 25 to recognize a condition in which the controls 12, 14 or 15 are activated.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawi Desc | Ima |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|------------|-----|
| | 1 | | | | | | | | | | | | |

h eb bgeeef efg ef be

☐ 3. Document ID: US 20030218767 A1

L1: Entry 3 of 55 File: PGPB Nov 27, 2003

DOCUMENT-IDENTIFIER: US 20030218767 A1

TITLE: Explicit feedback for remote printing

Summary of Invention Paragraph:

[0009] Another prior method of providing feedback to users on the status of print jobs sent to remote printers employs pop-up windows to inform a user when a print job has been printed. Although this method tells a user when a remotely printed job is available for pick-up, it too has disadvantages. As with the methods discussed above, a user cannot continue working on other applications when the status of the print job is being displayed in a pop-up window on the user's computer screen. Therefore, the user must close down the pop-up window to continue working on his/her computer. In addition, the pop-up window that indicates when a print job has been printed is disruptive to a user working on a computer application. Typically, user settings can be adjusted to disable the popup window, but then the user will not receive information about completed print jobs.

| Full | Title Cit. | ation Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWC | Drawu | Desc | Ima |
|-------|------------|---------------|---------|----------------|------|-----------|-----------|-------------|--------|-----|-------|------|---------|
| | | | | | | | | | , | | | | |
| | 4. Doc | ument ID | : US 20 | 0030142350 | Al | | | | | | | | |
| L1: H | Entry 4 | of 55 | | | | File: | PGPB | | | Jul | 31, | 2003 | 3 |

DOCUMENT-IDENTIFIER: US 20030142350 A1 TITLE: Control of multipart print jobs

Summary of Invention Paragraph:

[0005] It is common for such printers to be on a network connected to one or more computers. It is known for printer software to <u>display printer status</u> and to allow control of the <u>printer status</u> on a computer <u>display</u>. The printer status is then shown along with a queue for each print job assigned to each printer. This is convenient in the case of a single computer connected to a single printer. When more than one printer is connected to the computer, then each printer will have its own software from which the status for each print job sent to each printer is displayed separately, for example in a separate window on the display. It then becomes more difficult to control and to view the status of a split print job, because the print status information is displayed separately.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw | Desc | lma |
|------|--|---|---------|--------|----------------|------|---|---|---|---|------|------|------|-----|
| | ······································ | *************************************** | | *** | 2000100 | | *************************************** | *************************************** | *************************************** | *************************************** | | | | |
| 1 | 5. | Docume | ent ID: | US 20 | 0030081020 | Al | | | | | | | | |
| L1: | Entry | 5 of 5 | 55 | | | | File | e: PGPB | | | Ma | y 1, | 2003 | 3 |

DOCUMENT-IDENTIFIER: US 20030081020 A1

TITLE: Ink rationing based on page composition

Detail Description Paragraph:

[0019] The controller (120) is also responsible for tracking the ink supply (105) levels. The circuitry (110) in the inkjet pen (101) communicates the ink supply levels to the controller (120) which communicates the levels to the computer (103) for display on a printer status panel so as to show to a user, which ink supplies are nearing depletion or empty..

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw Desc Image 6. Document ID: US 20030020944 A1

L1: Entry 6 of 55 File: PGPB Jan 30, 2003

DOCUMENT-IDENTIFIER: US 20030020944 A1 TITLE: Printer pausing and reordering

CLAIMS:

24. The <u>computer</u> program product of claim 15, further comprising the step of: <u>displaying</u> print_status information during a print operation.

| Full | Title (| Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw | Desc | lma |
|-------|---------|----------|--------|--------|----------------|------|-----------|---|-------------|--------|------|------|------|-----|
| | | | | | | | | | | | | | | |
| | 7. D | ocume | nt ID: | US 20 | 030002077 | 'A1 | | *************************************** | | | | | | |
| L1: E | ntry 7 | 7 of 5 | 5 | | | | File | e: PGPB | | | Ĵа | n 2, | 200 | 3 |

DOCUMENT-IDENTIFIER: US 20030002077 A1 TITLE: Method of printing over a network

Detail Description Paragraph:

[0062] That is, it the pull-down button 84 is manipulated, the printer driver displays a list of already registered, usable printers as a pull-down menu in the print dialogue box. If the user selects an output destination printer from the pull-down menu, the print dialogue box becomes as shown in FIG. 10. If the user manipulates an "Update" button 85 in this state, a log-in authentication dialogue box (described above; see FIG. 5C) is displayed. Then, the client computer 2 establishes an SSL communication session with the server computer 1 (step 704), acquires status information of the selected output destination printer, and displays it in a printer status space 86 (step 705). Examples of the status information of the output destination printer that is acquired and displayed at this stage are "ready" indicating that the printer is waiting for print job data, "printing" indicating that the printer is performing a printing operation based on print job data, and the number of print jobs being spooled.

| Full Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima |
|--------------|----------|-------|--------|---|------|---|-----------|-------------|--------|------|-----------|-----|
| | | | | | | | | | | | | |
| | ···· | | | *************************************** | | *************************************** | | | | | | |

8. Document ID: US 20020134829 A1

L1: Entry 8 of 55

File: PGPB

Sep 26, 2002

DOCUMENT-IDENTIFIER: US 20020134829 A1

TITLE: Method of using and controlling image forming device, marketing method for image forming device and image forming device

Brief Description of Drawings Paragraph:

[0049] FIG. 10 is an explanatory view showing a screen example illustrating a <u>printer</u> status displayed on a display monitor of a <u>computer</u>;

| Full | Title Citatio | n Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw, D | esc | lma |
|-------|---------------|---------|---------|----------------|------|-----------|-----------|--|--------|------|---------|------|------------------------|
| | 9. Docum | nent ID | : US 20 | 020105671 | A1 | | | ************************************** | | | | | R ossinusao |
| L1: E | ntry 9 of | 55 | | | | File | e: PGPB | | | Αυ | ıg 8, 2 | 2002 | |

DOCUMENT-IDENTIFIER: US 20020105671 A1

TITLE: PRINTING SYSTEM

Abstract Paragraph:

A print system and method of using includes a print server; at least one printer connected to the print server; a plurality of <u>computers</u> connected to the print server; the print server includes a job observation stationary module for monitoring the status of the printer connected to the print server; and each of the <u>computers</u> includes a status monitor for <u>displaying the status of the printer</u> connected to the print server. The method includes monitoring a status of a printer with a print server; sending the status of the printer to a plurality of <u>computers</u> connected to the print server; and <u>displaying</u> the status of the printer connected to the print server.

CLAIMS:

1. A print system, comprising: a print server; at least one printer connected to the print server; a plurality of computers connected to the print server; the print server includes a job observation stationary module for monitoring the status of the printer connected to the print server; and each of the <u>computers</u> includes a status monitor for <u>displaying the status of the printer</u> connected to the print server.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawi Desc | Ima |
|------|-------|----------|---------|---------|---|------|-----------|-----------|-------------|--------|------|------------|-----|
| | | | | | *************************************** | | | | | | | | |
| | 10. | Docum | nent ID |): US 2 | 002007551 | 0 A1 | | | | | | | |

DOCUMENT-IDENTIFIER: US 20020075510 A1

TITLE: Job set manager

Detail Description Paragraph:

[0016] Job set manager 20 includes queue 34, queue manger 36, and user interface

generator 38. Generally speaking, queue 34 is an electronic holding bin allowing server 14 to manage a group of print requests simultaneously directed to a common printer. Queue manager 36 administers the print requests within queue 34. User interface generator 38 acts as a translator between queue manager 36 and client computer 12. User interface generator 38 causes client computer to display the status of each print request as well as user accessible controls for directing how queue manager 36 manipulates the print requests held within queue 34. User interface generator 38 also interprets the commands entered on client computer 12 using those controls sending the appropriate directions to queue manager 36. The controls produced by user interface generator 38 can take many forms. They may be push-buttons, radio buttons, text boxes, scroll bars, or pull-down menus accessible using a keyboard and/or a pointing device such as a mouse connected to client computer 12. In a non-graphical environment, the controls may be command lines allowing the user to enter textual commands using a keyboard connected to client computer 12.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWIC Draw. Desc Image Title: PGPB Jun 6, 2002

DOCUMENT-IDENTIFIER: US 20020069239 A1

TITLE: Data transmission system and its method

Detail Description Paragraph:

[0151] Computer 320 hands the received image data over to the printer 230p, and in response to the start-printing command from the cellular phone 700, the printing of the image is initiated in the printer 230p (FIG. 9 step S314). At the same time, the computer 320 lets a web page for printer status check, as shown in FIG. 10 (h) be displayed on the screen of the liquid crystal display 709 of the cellular phone 700. Now, when the user of the cellular phone 700 commands "printer status check", that command is transmitted to the computer 320, which checks the status of the printer 230p, reflecting the result of that check on the screen as shown in FIG. 10(i).

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. | Desc | Ima |
|-------|-------|----------|---------|---------|----------------|-------|-----------|-----------|-------------|--------|------|-------|------|-----|
| | 12. | Docum | nent II | D: US 2 | 2002005728 | 32 A1 | | | | ***** | | | | |
| L1: E | Entry | 12 of | 55 | | | | File | e: PGPB | | | May | 16, | 200 | 2 |

DOCUMENT-IDENTIFIER: US 20020057282 A1

TITLE: METHOD AND EQUIPMENT FOR MONITOR CALIBRATION AND STORAGE MEDIUM STORING A PROGRAM FOR EXECUTING THE METHOD

Detail Description Paragraph:

[0062] The personal computer 4 reads a printer driver program into the RAM 28 from the auxiliary storage device 30 and starts the program. Using this printer driver to communicate with the printer 2, the personal computer 4 exchanges handshake signals, including strobe signals and acknowledge signals, with the printer 2 via the control lines of the IEEE 1284 cable 10. The personal computer 4 can then transfer data and commands to the printer 2 via the data lines of the cable 10, to which commands the printer 2 responds by executing printing processes. If able to execute in byte mode, the printer 2 will transmit status data to the personal computer 4. If status data is

May 9, 2002

received from the printer 2 during printing operations, the personal <u>computer</u> 4 will <u>display the status of the printer</u> 2 in a status monitor display area 32a on the display 32.

File: PGPB

DOCUMENT-IDENTIFIER: US 20020054313 A1

TITLE: Print system, image processing apparatus and information processing apparatus

Summary of Invention Paragraph:

L1: Entry 13 of 55

[0005] In such print system, the printing apparatus and the host <u>computer</u> are connected through a bidirectional interface (for example serial, parallel, USB etc.) to enable monitoring of the <u>status of the printing apparatus on the display</u> image of the host <u>computer</u>, thereby improving convenience of the user.

Detail Description Paragraph:

[0048] Based on the print status information transmitted from the printing apparatus 101, the window controller 206 displays the status of the printing apparatus 101 in a format (status window of the printing apparatus 101) as shown in FIG. 4 on the display image of the host computer 102. More specifically, the window controller 206 is controlled by the CPU of the host computer 102, based on a display control module (stored in a ROM of the host computer 102 or an external memory) contained in the host program of the present invention.

Detail Description Paragraph:

[0064] In response, the printer controller 301 returns the print status information to the host computer 102, which displays the status of the printing apparatus 101 on the display image of the host computer 102 in the format shown in FIG. 4 (status window of the printing apparatus), as already explained in relation to FIG. 2. An engine controller 303 controls a printer engine 304 for executing the actual print process. The printer engine system 305 (corresponding to the printer engine system 103 shown in FIG. 1) is composed of the engine controller 303 and the printer engine 304.

<u>Detail Description Paragraph</u>:

[0102] If no printing command has been issued, a status displaying process shown in FIG. 17 is executed to display the current status of the printing apparatus 101 on the display unit of the host computer 102 (S2502). Then there is discriminated whether the printer engine system 103 of the printing apparatus is occupied by a function of a higher priority than that of the print function (S2503), and, if occupied, the sequence proceeds to a step S2502 as the print function cannot be executed. If not occupied, the sequence returns to the step S2501 in order to check again whether a print command is given.

<u>Detail Description Paragraph</u>:

[0105] On the other hand, if there remains any page of which print data are not yet transferred to the printing apparatus 101, there is executed the status display process shown in FIG. 17 to check the current status of the printing apparatus and to cause the display unit of the host <u>computer</u> 102 to <u>display the status of the printing</u> apparatus (S2505).

Detail Description Paragraph:

[0111] FIG. 17 is a flow chart showing a process of the host <u>computer</u> 102 for acquiring and <u>displaying the status of the printing</u> apparatus. The control program of this process is executed by the CPU of the host computer 102, wherein S1701 to S1704 indicate process steps.

Detail Description Paragraph:

[0114] Then, based on the obtained status information of the printing apparatus 101, the window controller 206 of the host computer 102 displays the status of the printing apparatus 101 as shown in any of FIG. 4 and FIGS. 12 to 16 (S1704). The display shown in FIG. 4 indicates that the printing apparatus is idle.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWC Draw Desc Imag

☐ 14. Document ID: US 20020048039 A1

L1: Entry 14 of 55 File: PGPB Apr 25, 2002

DOCUMENT-IDENTIFIER: US 20020048039 A1 TITLE: OUTPUT CONTROL METHOD AND APPARATUS

Detail Description Paragraph:

[0052] The control flow of the process in the printer control system thus constructed is discussed referring to flow diagrams shown in FIGS. 2 through 4. FIG. 2 illustrates the process in which the host computer monitors the status of the printer. Prior to sending print data to the printer, the host computer sends a command for setting the printer to report a status when the state in the printer changes (201). When the printer changes its state frequently, the time interval between the transmissions of status is shortened, adversely affecting print data processing. For this reason, the time interval for sending the status to the host computer is set at the same time. Upon receiving this command, the printer performs the process shown in FIG. 4. The printer starts the transmission of the status to the host computer (401) in response to the command requiring the setting of returning the printer status and the command requiring the setting of the time interval of the transmission of the status. The printer sets the status indicative of its current status in a transmission buffer (402). The printer transmits the content in the transmission buffer to the host computer (403). The host computer now knows the printer status prior to printing. The printers determines whether the printer status changed (404). The change in the printer status means that the printer is shifted from on-line ready (standby) state to another state, for example, test printing, data processing, an occurrence of no paper, an occurrence of paper jamming or the like. In this embodiment, the printer is shifted from the standby state to a data reception or data processing because print data is sent from the host computer immediately subsequent to the start of the status transmission. The printers determines whether a paper sheet is delivered (405). Since the delivery of the paper sheet does not start immediately, the process goes to step 406, and a status indicating that the printer is receiving data or processing data is set in the transmission buffer. The process returns to step 403, where the printer transmits the content of the transmission buffer to the host computer at the time interval set by the host computer. When it is determined in step 405 that the paper delivery started, the printer sets, in the transmission buffer, the printer status and a value indicating how much the paper delivery is in progress. The process returns to step 403, where the printer transmits the content of the transmission buffer to the host computer at the time interval set by the host computer. If there is no change in the status in step 404, no step is taken. While no change takes place, the printer transmits the same status as the previously sent one at the timing when the content in the transmission buffer is to be sent. Returning to FIG. 2, the process in the host computer is continuously discussed. After the host computer transmits to the printer the command requiring the setting of the return of the printer status when the printer changes its status (201), the host computer transmits the print data to the printer (202). The host computer counts time for a predetermined constant duration (203). The constant duration is here the time during which the host computer checks to see if the printer has sent the status indicative of the state of the printer, and is set separately from the time interval for the transmission of the printer status. In this embodiment, the time counting duration is predetermined, but may be designed to be optionally set. When the

constant duration elapses, the host computer checks to see if the printer has sent a status indicative of the state of the printer (204). The content of the received status is transferred to the control of an animation program for <u>displaying the printer status</u> on the host <u>computer</u> screen (205). Referring to the content of the status acquired in step 204, the host computer determines whether the paper delivery is completed (206). When the paper delivery is not completed, the process returns to step 203. Steps 203-206 are repeated until it is determined in step 206 that the paper delivery is completed. When it is determined in step 206 that the paper delivery is completed, the monitoring program ends.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWC Draw Desd Image 15. Document ID: US 20020048038 A1

L1: Entry 15 of 55 File: PGPB Apr 25, 2002

DOCUMENT-IDENTIFIER: US 20020048038 A1

TITLE: INFORMATION PROCESSING APPARATUS AND OUTPUT APPARATUS

Summary of Invention Paragraph:

[0007] Such a "setup utility" allows a host computer to perform operations which are usually performed from an operation panel of a printer. In many cases, however, the host computer performs operations for selecting items one-sidedly for the printer, so the status of the printer is not reflected on the display in real time. In addition, a real-time display of a paper feed condition of the printer is often performed on only the panel of the printer main body.

| Full Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMC | Draw | Desc | lma |
|------------|----------|--------|---------|----------------|-------|-----------|-----------|-------------|--------|-----|------|---|-----|
| | | | 110.0 | | 4 4 4 | | | | | | | *************************************** | |
| L 16. | Docum | ent IL |): US 2 | 2002003084 | IAI | | | | | | | | |
| L1: Entry | 16 of | 55 | | | | File | : PGPB | | | Mar | 14, | 200 | 2 |

DOCUMENT-IDENTIFIER: US 20020030841 A1

TITLE: Information processing apparatus and output apparatus

Summary of Invention Paragraph:

[0007] Such a "setup utility" allows a host computer to perform operations which are usually performed from an operation panel of a printer. In many cases, however, the host computer performs operations for selecting items one-sidedly for the printer, so the status of the printer is not reflected on the display in real time. In addition, a real-time display of a paper feed condition of the printer is often performed on only the panel of the printer main body.

| Full | Title | Citation | Front | Revieio | Classification | Date | Reference | Sequences | Attachments | Claims | KONAC | Draw Desc | Iro |
|------|-------|----------|-------|---------|----------------|------|-----------|-----------|-------------|--------|-------|-----------|----------------------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | CI | aims | aims KWC | aims KWIC Draw. Desc |

☐ 17. Document ID: US 20020010806 A1

L1: Entry 17 of 55 File: PGPB Jan 24, 2002

DOCUMENT-IDENTIFIER: US 20020010806 A1

TITLE: Method for installing a printer driver and computer-readable medium storing

installation program

CLAIMS:

15. The <u>computer</u>-readable medium according to the claim 13 wherein said setup information includes language information used for <u>displaying the status of printing</u> conditions on a screen.

| Full | Title | Citation F | ront | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw (|)esc | Ima |
|------|-------|------------|-------|--------|----------------|------|-----------|-----------|-------------|--------|--|--------|---|-----|
| | | | | | | | | | | | | | | |
| Г | 18. | Documer | nt ID | : US 2 | 2001005078 | 1 A1 | | | | | 40444444444444444444444444444444444444 | | *************************************** | |
| | | 18 of 5 | | | | | File | : PGPB | | | Dec | 13, | 2001 | |

DOCUMENT-IDENTIFIER: US 20010050781 A1

TITLE: Printing control method, apparatus and storage medium therefore, and printing

system

Detail Description Paragraph:

[0039] The display shown in FIG. 4 includes an area 401 which indicates whether print data is print data with an accompanying password. If the data is print data with an accompanying password, a "locked" icon 407 is displayed in this area. An area 402 displays the time at which print data was received from the host computer 3000, an area 403 displays the job name associated with the print data, an area 404 displays the user name associated with the print data, and an area 405 displays the present status of the print job. In the example of FIG. 4, the status of both print jobs is "WAITING". Also displayed is a button 406 that allows the user to call an input screen that is for entering a password. Specifically, the printer 1500 is such that if the print data is print data with an accompanying password, processing for printing this print data will not be executed unless the user of printer 1500 enters a password identical with that of the print data with the accompanying password. Thus, the confidentiality of a printout produced by the printer 1500 is maintained.

| Full Titl | e Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawu Des | c Ima |
|-----------|------------|---------|---------|----------------|------|-----------|-----------|-------------|--------|------|---------------------------------------|-------|
| | | | | | | | | | | | · · · · · · · · · · · · · · · · · · · | |
| □ 19 | . Docum | nent ID |): US 6 | 734985 B1 | | | | | | | | |

DOCUMENT-IDENTIFIER: US 6734985 B1

TITLE: Printing apparatus, printing system and method of controlling same

Brief Summary Text (10):

According to the present invention, the foregoing object is attained by providing a printing system comprising a <u>computer</u> terminal and a network printer, wherein the <u>computer</u> terminal includes: means for creating a status notification request which causes printer status to be posted periodically; means for periodically transmitting a printer-

status notification registration request; means for transmitting a printer-status notification deletion request; means for receiving printer status notification from the printer; and means for displaying printer status in dependence upon the printer status; and the network printer includes: means for receiving a printer-status notification registration request from at least one computer; means for registering each printerstatus notification registration request as registration information; means for deleting the registration information if the printer-status notification registration request has not been received from the same computer within a registration retention time defined in the printer-status notification registration request; means for updating the registration retention time anew if the printer-status notification registration request has been received from the same computer within the registration retention time defined in the printer-status notification registration request; sensing means for sensing a change in printer status; means for notifying a network address of a computer, which is defined in the registration information, of a change in printer status sensed by the sensing means; means for receiving the printer-status notification deletion request of a computer; and means for deleting the registration information in response to the printer-status notification deletion request.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWC Draw. Desc Image 20. Document ID: US 6721879 B1
L1: Entry 20 of 55 File: USPT Apr 13, 2004

DOCUMENT-IDENTIFIER: US 6721879 B1

TITLE: Medium containing computer peripheral device maintenance guide program, computer peripheral device maintenance guide device, and computer peripheral device maintenance guide method

CLAIMS:

1. A <u>computer</u> program product, having a <u>computer</u> readable medium with a printer installation operation guide program, for enabling a <u>computer of a computer</u> system to perform predetermined steps, the <u>computer</u> system further including a printer to be installed, the printer diagnosing its status at predetermined intervals, and, in response to detecting a change in the status, generating printer status information and transmitting the printer status information to the <u>computer</u>, the predetermined steps comprising: a. entering a <u>printer status and also displaying</u> predetermined guidance information on the <u>computer</u>, relating to an operation for installing a printer; and then b. automatically detecting, on the computer, the printer status by monitoring the printer status information obtained from the printer; and then c. in response to the detected <u>printer status</u>, automatically displaying subsequent guidance information on the <u>computer</u> system;

wherein the subsequent guidance information corresponds to the progress of the printer installation operation, and is based on the results of detecting the printer status.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Saturities 19 | achinents. | Claims | KWIC | Draw, Desc | lma |
|------|--|----------|-------|--------|----------------|------|-----------|---------------|------------|--------|------|------------|-----|
| | | | | | | | | | | | | | |
| | ************************************** | | | | | | | | | | | | |
| | | | | | 717693 B2 | | | | | | | | |

L1: Entry 21 of 55

File: USPT Apr 6, 2004

DOCUMENT-IDENTIFIER: US 6717693 B2

TITLE: Information processing apparatus and output apparatus

Brief Summary Text (8):

Such a "setup utility" allows a host computer to perform operations which are usually performed from an operation panel of a printer. In many cases, however, the host computer performs operations for selecting items one-sidedly for the printer, so the status of the printer is not reflected on the display in real time. In addition, a real-time display of a paper feed condition of the printer is often performed on only the panel of the printer main body.

File: USPT

☐ 22. Document ID: US 6714211 B2

L1: Entry 22 of 55

Mar 30, 2004

DOCUMENT-IDENTIFIER: US 6714211 B2

TITLE: Method and equipment for monitor calibration and storage medium storing a program

for executing the method

Detailed Description Text (7):

The personal computer 4 reads a printer driver program into the RAM 28 from the auxiliary storage device 30 and starts the program. Using this printer driver to communicate with the printer 2, the personal computer 4 exchanges handshake signals, including strobe signals and acknowledge signals, with the printer 2 via the control lines of the IEEE 1284 cable 10. The personal computer 4 can then transfer data and commands to the printer 2 via the data lines of the cable 10, to which commands the printer 2 responds by executing printing processes. If able to execute in byte mode, the printer 2 will transmit status data to the personal computer 4. If status data is received from the printer 2 during printing operations, the personal computer 4 will display the status of the printer 2 in a status monitor display area 32a on the display 32.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Adschinents. | Claims | KWIC | Draw, Desc | lma |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|--------------|--------|------|------------|-----|
| | | | | | | | | | | | | | |

23. Document ID: US 6693720 B1

L1: Entry 23 of 55 File: USPT

Feb 17, 2004

DOCUMENT-IDENTIFIER: US 6693720 B1

TITLE: Method and apparatus for integrating print job status information and user options with implicit job interruption

Brief Summary Text (10):

In accordance with another aspect of the present invention, an article of manufacture includes a computer usable medium having computer readable code embodied therein to cause a display to depict a graphical user interface for setting printer options. The <u>computer</u> readable program code in the article of manufacture is configured to display, in the graphical user interface, a list of user-selectable printing features including a status feature, with the status feature selected, in response to a command to execute a print job, and to <u>display a current status of the print</u> job together with the list.

CLAIMS:

7. An article of manufacture comprising a computer usable medium having computer readable code embodied therein to cause a display to depict a graphical user interface for setting printer options, the computer readable program code in the article of manufacture being configured to display, in the graphical user interface, a list of user-selectable printing features including a status feature, with the status feature selected, in response to a command to execute a print job, to display a current status of the print job together with the list, to receive a selection of one of the user-selectable printing features other than the status feature, to interrupt the print job in response to receiving the selection, and to display, in the graphical user interface, a user-actuable control for the selected one of the features.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | e den ev | Anachments | Claims | KWIC | Drawu | Desc | lma |
|------|-------|----------|---------|---------|----------------|------|-----------|----------|------------|--------|------|-------|------|-----|
| | 24. | Docum | nent II | D: US 6 | 6676236 B1 | | | | | | | | | |
| L1: | Entry | 24 of | 55 | | | | File | : USPT | | | Jan | 13, | 2004 | 4 |

DOCUMENT-IDENTIFIER: US 6676236 B1

TITLE: Information processing system including the printing apparatus

Other Reference Publication (3):

"Display of Printer Status Information for a Typewriter Attached to a Personal Computer", IBM Technical Disclosure Bulletin, vol. 30, No. 6, p. 243, Nov. 1987.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Anadamente | Claims | KWC | Draw, Desc | lma |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|------------|--------|-----|------------|-----|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

☑ 25. Document ID: US 6674540 B1

L1: Entry 25 of 55 File: USPT Jan 6, 2004

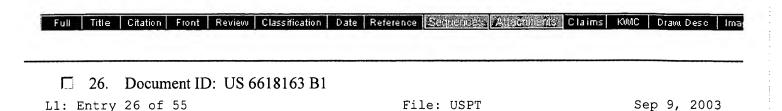
DOCUMENT-IDENTIFIER: US 6674540 B1

TITLE: Assembling and printing compound documents

Detailed Description Text (13):

Printers can now be configured remotely at the user's personal computer through the use of an simple network management protocol (SNMP) and bi-directional communications between printers and printer clients. Hewlett-Packard's JetAdmin.RTM. utility allows the user to effectively see and use the printer control panel at his or her personal computer. The invention includes several additional optional features that take advantage of this remote control technology. To help provide reliable unattended printing of the compound document, the status of the printer is monitored by and displayed at the user's computer. The user is alerted to any problems with the print job by, for example, displaying the error message(s) generated by the printer and issuing an audible alarm or paging the user (by phone, beeper or the like), or both, in response to the receipt of an error message. According to another feature of the invention, the user is allowed to send the print job to an alternate/back-up printer in response to a print failure or in response any other error message from the printer. The print job could also be sent automatically to an alternate "back-up" printer in response to an error message from the printer.

b g ee e f ef h e b e f g b



DOCUMENT-IDENTIFIER: US 6618163 B1

TITLE: System and method for symbolically displaying printer status information

CLAIMS:

16. An article of manufacture, comprising: a computer-usable medium including computerreadable program code means, embodied therein, for symbolically displaying printer status information of a printer connected to an information processing system having at least one workstation in which a processor unit, a screen, and an operator-control device are operatively connected; the printer being provided with a control unit and an operator control panel, the control unit being adapted to execute print jobs in an autonomous mode or a command-controlled mode; the control unit, in the autonomous mode, starting the execution of a print order on its own initiative; the control unit, in the commandcontrolled mode, starting the execution of a reproduction process, including a print order, in response to a start command from the operator control panel of the printer; and a network to which the workstation and the printer are operatively connected, the computer-readable program code means including: computer-readable program code means for sending print jobs to the printer and calling up or receiving status information concerning the printer; computer-readable program code means for displaying current status information concerning the printer on the workstation screen in the form of a symbolic illustration or icon; and computer-readable program code means for displaying different icons for the cases in which the printer is active in the autonomous mode and in which the printer is active in the command-controlled mode.

| Full Title | Citation Front | Review (| Classification | Date | Reference | | je je je | innent. | Claims | KWIC | Draw | Desc | lma |
|------------|----------------|----------|----------------|------|-----------|---------|----------|---------|--------|------|---|------|-----|
| □ 27. | Document ID: | : US 65 | 87971 B1 | | | | | | | | *************************************** | | |
| L1: Entry | 27 of 55 | | | | Fi | le: USI | 2T | | | Ju. | l 1, | 200 | 3 |

DOCUMENT-IDENTIFIER: US 6587971 B1

** See image for Certificate of Correction **

TITLE: Print control method and print control apparatus

Brief Summary Text (10):

First, even if a printer executes a printing operation and the status of the printer changes after a short time, the host computer requests the transmission of status information to the printer only at the preset time interval. If the preset time interval is longer than the interval over which the status of the printer changes, there arises the problem that a time lag is caused between the actual status of the printer and the status of the printer display on the display unit or the like of the host computer.

Drawing Description Text (3):

FIG. 2 is a flowchart showing a process for controlling printer status display processing

h eb bgeeef efg ef be

operation executed by the host computer of the system;

Detailed Description Text (8):

The CPU 6 of the host computer main body 3, among its many other functions, serves as time interval control means for controlling a time interval at which the transmission of the status information is requested of the printer 2 in accordance with the status of the printer 2 judged from previously-received status information. The host computer 1 outputs the image of data composed, typically of a mixture of characters, graphics and images which have been created by the application program and the like in the hard disk 8, to the printer 2 connected to the host computer 1 through the printer control program in the hard disk 8. Further, the host computer 1 displays the status information of the printer 2 on the CRT 5 through the CRT controller 13 using the printer status display program in the hard disk 8. The printer 2 receives image data from the host computer 1 and records the image on recording paper. The printer 2 receives the command to create the status information from the host computer 1 and creates the printer status information in response to that command. Further, the printer 2 receives from the host computer 1 a request for transmitting the printer status information and transmits the information to the host computer 1.

Detailed Description Text (9):

Next, operation of the <u>printer status display</u> program-operating on the host <u>computer</u> 1 of the system arranged as described above will be described with reference to the flowchart of FIG. 2.

<u>Detailed Description Text</u> (18):

At step S303, when the status information received from the printer 2 is the same as the current printer status displayed on the CRT 5 of the host computer 1 at step S303, the status display processing is interrupted, and the process goes to step S203 in FIG. 2. But at step S303, when the status information received from the printer 2 is different from the printer status information displayed on the CRT 5 of the host computer 1, the process goes to step S304. At step S304, a determination is made as to whether or not the content of the status information which has been received from the printer 2 and stored in the operating status field represents that the printer 2 is in any of the operations of paper feed, print and paper discharge, from which a conclusion is drawn as to whether the printer 2 is in printing operation or in a waiting status. In addition, it is also determined whether the printer 2 is in an error state or not. When the content in the operating status field represents paper feed, print or paper discharge, or when the printer 2 is in an error state, the process goes to step S305. Further, when the content in the operating status field represents that the printer 2 is in the waiting status, the process goes to step S306.

Detailed Description Text (39):

A third embodiment of the present invention will be described with reference to FIG. 8 to FIG. 11. FIG. 8 is a block diagram showing the arrangement of a system having a print control apparatus according to the third embodiment of the present invention. In FIG. 8, the same numerals as used in FIG. 1 are used to denote the same parts. The arrangement shown in FIG. 8 is different from that shown in FIG. 1 in the points that the printer status display program storing region 8c of the hard disk 8 in FIG. 1 is absent from FIG. 8; the printer 2 receives a request for transmitting type information and the like of the printer 2 from the host computer 1 and transmits that information to the host computer 1; the data I/O controller 10 of the host $\underline{\text{computer}}$ main body 3 serves as printer information acquisition means for acquiring the type information and the like from the printer 2; the CPU 6 of the host computer main body 3 serves as printer type comparison means for comparing the printer type information acquired from the printer 2 with the printer type which is assumed by image drawing commands which the host computer 1 intends to transmits to the printer 2; and the CPU 6 of the host computer main body 3 serves as command transmission control means for controlling whether the image drawing commands are to be transmitted to the printer 2 or not in accordance with the result of comparison of the printer types.

Full Title Citation Front Review Classification Date Reference Sections Wildelines Claims KMC Draw Desc Ima

☐ 28. Document ID: US 6583886 B1

L1: Entry 28 of 55 File: USPT Jun 24, 2003

DOCUMENT-IDENTIFIER: US 6583886 B1

** See image for Certificate of Correction **

TITLE: Printer status monitoring method and storage medium using packets

Abstract Text (1):

An object of the invention is to automatize monitoring processing for displaying on a display unit a status of a print apparatus which is receiving a transferred print job. In order to achieve the object, after print data is transmitted, as a packet received from a printer (103) is analyzed to control start or end of status monitoring of the printer (103) by a CPU of a computer system (101), the packet received from the printer (103) is also analyzed to monitor a status of the printer (103) and then display monitored contents on a monitor (104).

Brief Summary Text (11):

The present invention has been made to solve the above-described problem. An object of the present invention is to provide a print system in which a printer side to which a print job is transferred from a user manages informing destinations to which a status of the printer changing when the printer processes the transferred print job is to be informed, and transfers the destinations to a data processing apparatus appropriately managing packets, whereby monitoring processing to cause a display unit to display the status of the printer receiving the transferred print job without forcing the user to issue an operation instruction can be automatized; a method which monitors the status of the print system; and a storage medium which stores therein a program readable by a computer.

| | Date Melelelles | Misionineris Claims KWMC Draw Desc Im: |
|---|-------------------|--|
| | | |
| A | | |

29. Document 1D: US 0480908 B2

L1: Entry 29 of 55 File: USPT

File: USPT Nov 26, 2002

DOCUMENT-IDENTIFIER: US 6486968 B2

** See image for <u>Certificate of Correction</u> **
TITLE: Output control method and apparatus

Detailed Description Text (7):

The control flow of the process in the printer control system thus constructed is discussed referring to flow diagrams shown in FIGS. 2 through 4. FIG. 2 illustrates the process in which the host computer monitors the status of the printer. Prior to sending print data to the printer, the host computer sends a command for setting the printer to report a status when the state in the printer changes (201). When the printer changes its state frequently, the time interval between the transmissions of status is shortened, adversely affecting print data processing. For this reason, the time interval for sending the status to the host computer is set at the same time. Upon receiving this command, the printer performs the process shown in FIG. 4. The printer starts the transmission of the status to the host computer (401) in response to the command requiring the setting of returning the printer status and the command requiring the setting of the transmission of the status. The printer sets the status indicative of its current status in a transmission buffer (402). The printer transmits the content in the

transmission buffer to the host computer (403). The host computer now knows the printer status prior to printing. The printers determines whether the printer status changed (404). The change in the printer status means that the printer is shifted from on-line ready (standby) state to another state, for example, test printing, data processing, an occurrence of no paper, an occurrence of paper jamming or the like. In this embodiment, the printer is shifted from the standby state to a data reception or data processing because print data is sent from the host computer immediately subsequent to the start of the status transmission. The printers determines whether a paper sheet is delivered (405). Since the delivery of the paper sheet does not start immediately, the process goes to step 406, and a status indicating that the printer is receiving data or processing data is set in the transmission buffer. The process returns to step 403, where the printer transmits the content of the transmission buffer to the host computer at the time interval set by the host computer. When it is determined in step 405 that the paper delivery started, the printer sets, in the transmission buffer, the printer status and a value indicating how much the paper delivery is in progress. The process returns to step 403, where the printer transmits the content of the transmission buffer to the host computer at the time interval set by the host computer. If there is no change in the status in step 404, no step is taken. While no change takes place, the printer transmits the same status as the previously sent one at the timing when the content in the transmission buffer is to be sent. Returning to FIG. 2, the process in the host computer is continuously discussed. After the host computer transmits to the printer the command requiring the setting of the return of the printer status when the printer changes its status (201), the host computer transmits the print data to the printer (202). The host computer counts time for a predetermined constant duration (203). The constant duration is here the time during which the host computer checks to see if the printer has sent the status indicative of the state of the printer, and is set separately from the time interval for the transmission of the printer status. In this embodiment, the time counting duration is predetermined, but may be designed to be optionally set. When the constant duration elapses, the host computer checks to see if the printer has sent a status indicative of the state of the printer (204). The content of the received status is transferred to the control of an animation program for displaying the printer status on the host computer screen (205). Referring to the content of the status acquired in step 204, the host computer determines whether the paper delivery is completed (206). When the paper delivery is not completed, the process returns to step 203. Steps 203-206 are repeated until it is determined in step 206 that the paper delivery is completed. When it is determined in step 206 that the paper delivery is completed, the monitoring program ends. The status transmitted by the printer includes information about the state of the printer, a total number of pages printed, and the length of the paper sheet. The status is a fixed-length ASCII code expressed in a sequence of numbers expressed in 0-9 as shown in FIG. 5. The sequence of numbers is delimited by several digits to express various states. More discussion on this will provided later. The status is written onto the transmission buffer each time the state of the printer changes. For example, when the printer is on ready standby, the status indicative of the standby is written onto the transmission buffer. When the printer is working on a test print, the status is updated to indicate the test print in progress. When it is determined in step 407 in FIG. 4 that the paper delivery starts, the printer transmits to the host computer the status of the printer and, along with it, the percentage value indicating how much the paper delivery operation is in progress. The percentage value is the ratio of the duration from the paper delivery start to the moment the status request command is received to the total time (100%) from the paper delivery start to the end. For example, when a paper sheet takes 10 seconds from its delivery start to end, the printer returns a value of 20% to the host computer at the point 2 seconds later from the delivery start. Although the percentage value may be set at steps of 1%, an approximate measure indicating how much the paper delivery is roughly in progress works. Returning a too detailed value simply increases a load imposed on both the printer and the host computer. The percentage value of the total time for delivering one page may be divided into five or six. When a paper sheet takes 10 seconds for its delivery from start to end with the percentage value divided into five, the printer returns to the host computer a percentage of 20% within a time band extending from 2 seconds or later till 4 seconds, and a percentage value of 40% within a time band from 4 seconds or later till 6 seconds. Since the time required for the delivery of one page of paper sheet varies depending on its sheet size, the time bands and their percentage are also varied, for example, one paper sheet size taking 15 seconds from start to end, results in 20% within a time band from 3 seconds or later till

6 seconds, and 40% within a time band from 6 seconds or later till 9 seconds. The time bands and corresponding percentage values in each sheet are beforehand stored in the printer. The animation program that is called in step 205 in FIG. 2 is now discussed referring to the flow diagram shown in FIG. 3. The animation program displays graphics and characters representing the process of the printer on the host computer screen, and switches the display depending on the progress of the printer processing. Graphics used in this presentation respectively correspond to the statuses. FIGS. 8 through 16 show examples in the windows of status monitors. In step 205 in FIG. 2, the status indicating the state of the printer is transferred. The status includes information about printer states, for example, ready (standby) state, no paper, paper jammed, the difference between ON-LINE and OFF-LINE, the sheet size, and the progress of print data processing indicating standby state and state of data processing. The animation program receives the status including these pieces of information in step 301 in FIG. 3. Comparing it with the previously received one (302), the animation program ends itself if the two statuses are identical, and the host computer returns to the monitoring program (FIG. 2). If the two statuses are different, the animation program references a table that associates the statuses with graphics to be displayed, and selects the graphics to be displayed (303). For example, the image in FIG. 8 is displayed in the on-line ready state (standby), the image in FIG. 9 is displayed when data is being processed, and the image in FIG. 10 is displayed when the status indicative of the detected forward end of paper is received. The graphic is now presented on screen (304). The animation program ends and the host computer returns to the monitor program (FIG. 2). During the paper delivery, of the information of the status, the value indicating the progress of the print data processing is a percentage value that represents how far paper feeding proceeds relative to the entire length of each paper sheet. For example, when six points are set up in the total time required from the start to the end of paper feeding, the printer presents 16%, 33%, 49%, 66%, 82%, and 99%. An application program prepares six graphics corresponding to these percentage values. FIG. 11 shows a 16% progress, FIG. 12 shows a 33% progress, FIG. 13 shows a 49% progress, FIG. 14 shows a 66% progress, FIG. 15 shows a 82% progress, and FIG. 16 shows a 99% progress in the paper feeding process. The host computer optionally sets the number of points representing the degree of progress. The structure of the status is now discussed referring to FIGS. 5 and 6. FIG. 5 shows an actual status. As shown, the status is an ASCII code expressed in a sequence of numbers ranging from 0 to 9. First five bytes are a status called "CJLCODE" to be used to express the printer status. Examples of its content are shown in FIG. 6. For example, "10000" denotes a ready (standby) state, and "10020" denotes a warm-up state. One byte subsequent to the first five bytes is an ON-LINE status, indicating whether the printer is off-line or on-line. "1" denotes ON-LINE while 0 denotes OFF-LINE. Subsequent two bytes are for the sheet size. The length of the paper sheet is expressed in centimeters. FIG. 6 lists the sheet sizes and their corresponding status values.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | September | Alter rinerica | Claims | KWC | Draw | Desc | lma |
|---|-------|----------|--------|---------|----------------|------|---|-----------|----------------|--------|-----|------|------|---------|
| *************************************** | | | | | | | *************************************** | | | | | | | |
| | 30. | Docum | ent II |): US 6 | 369905 B1 | | | | | | | | | |
| L1: E | Entry | 30 of | 55 | | | | Fi. | le: USPT | | | Αp | r 9, | 200 | 2 |

DOCUMENT-IDENTIFIER: US 6369905 B1

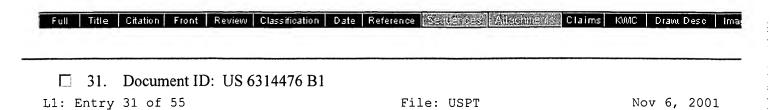
** See image for Certificate of Correction **

TITLE: Information processing apparatus and output apparatus

Brief Summary Text (8):

Such a "setup utility" allows a host computer to perform operations which are usually performed from an operation panel of a printer. In many cases, however, the host computer performs operations for selecting items one-sidedly for the printer, so the status of the printer is not reflected on the display in real time. In addition, a real-time display of a paper feed condition of the printer is often performed on only the panel of the printer main body.

b g ee e f e f g ef h e b b



DOCUMENT-IDENTIFIER: US 6314476 B1

TITLE: Network adapter enabling bidirectional monitoring of a terminal device between a computer and a managing device

Detailed Description Text (17):

In the response data shown in FIGS. 2C and 2D, @ABC and the following portion of response data, shown on the first line in each figures, constitute a command portion corresponding to the command shown in FIGS. 2A or 2B. A portion of the response data shown on the second line in each of FIGS. 2C and 2D is a status code portion that indicates the present status in the form of a predetermined code. A portion of the response data shown on the third line in each figure indicates the present status of the printer 13 to the display device of the personal computer 12 in the form of a character sequence (string data sandwiched by " "). A portion of the response data shown on the fourth line in each figure carries information (on-line information) that indicates the present status of a data receiving port. The on-line information indicates "FALSE" when reception is impossible, and "TRUE" when reception is possible. As can be seen from FIGS. 2A-2D, the dedicated transmission command can be formed by adding EXT to the normal transmission command, and the response data in response to the dedicated transmission command can be formed by adding EXT to the normal transmission command.

| Full | Title Citation | Front | Review | Classification | Date | Reference | Serveror Attack | dnens, Claims | KWMC Dra | ım Desc | lma |
|--------|----------------|---------|---------|----------------|------|-----------|-----------------|---------------|----------|--|-------------|
| | | | | 200400701 | | | | | · | ······································ | |
| | 32. Docu | ment II |): US 6 | 5208428 B1 | | | | | | | |
| L1: En | try 32 o | f 55 | | | | File | : USPT | | Mar 27 | , 2001 | |

DOCUMENT-IDENTIFIER: US 6208428 B1

TITLE: Printing system and charging method thereof

Brief Summary Text (33):

That is, according to a seventh aspect of the present invention, a printing system including a server computer, a plurality of client computers connected to the server computer through a network and a printer which is to be used commonly by the client computers and notices a status and construction of the printer to the server computer is featured by that the server computer comprises a status storing database for storing data of the status and construction of the printer and noticing a generation of update of the data, printer status monitor means for acquiring data of the status and construction from the printer and storing the data in the status storing database, printing data transfer monitor means for storing a name of a printing data producer transferred from the higher rank device to the printer and values of total print numbers before a transfer of the printing data acquired from the printer and after the printing data is printed by and ejected from the printer in the status storing database, printer status display means for displaying a current status of the printer by acquiring the data of the status and construction from the status storing database and monitoring a generation of update of the data and print charging log producing means for producing a record of an accumulated

h eb bgeeef efg ef be

number of prints for every producer's name by acquiring the name of the producer of the printing data in transfer and the number of prints of the printing data from the status storing database every transfer of the printing data from the higher rank device to the printer and network communication means for transmitting an access to the data of the status and construction in the status storing database from the client computers through the network, and that each client computer comprises means for copying the data in the status storing database in the printer through the network communication means and means for monitoring the status and construction of the printer and changing the setting of the printer.

Brief Summary Text (35):

According to an eighth aspect of the present invention, a charging method of a printing system including a server computer, a plurality of client computers connected to the server computer through a network and a printer which is to be used commonly by the client computers and notices a status and construction of the printer to the server computer is featured by that the server computer executes the steps of storing data of the status and construction of the printer and noticing a generation of update of the data, acquiring data of the status and construction from the printer and storing the data in the status storing database, storing a name of a printing data producer transferred from the higher rank device to the printer and values of total print numbers before a transfer of the printing data acquired from the printer and after the printing data is printed by and ejected from the printer in the status storing database, displaying a current status of the printer by acquiring the data of the status and construction from the status storing database and monitoring a generation of update of the data, producing a record of an accumulated number of prints for every producer's name by acquiring the name of the producer of the printing data in transfer and the number of prints of the printing data from the status storing database every transfer of the printing data from the higher rank device to the printer and transmitting an access to the data of the status and construction in the status storing database from the client computers through the network, and that each client computer executes the steps of copying the stored data of the status and construction in the printer by accessing the stored data and monitoring the stored data of the status and construction and changing the setting of the printer.

Brief Summary Text (36):

According to a ninth aspect of the present invention, a recording medium recorded with a charging control program of a printing system including a server computer, a plurality of client computers connected to the server computer through a network and a printer which is to be used commonly by the client computers and notices a status and construction of the printer to the server computer is featured by that the charging control program instructs the server computer to store data of a status and construction of the printer and notice a generation of update of the data, to acquire data of the status and construction from the printer and store the data, to store a name of a printing data producer transferred from the higher rank device to the printer and values of total print numbers before a transfer of the printing data acquired from the printer and after the printing data is printed by and ejected from the printer, to display a current status of the printer by acquiring the data of the status and construction from the status storing database and monitoring a generation of update of the data, to produce a record of an accumulated number of prints for every producers name by acquiring the name of the producer of the printing data in transfer and the number of prints of the printing data every transfer of the printing data from the higher rank device to the printer and to transmit an access to the stored data of the status and construction from the client computers through the network, and that the charging control program instructs each of the client computer to perform the access to copy the data of the status and construction in the printer, to monitor the status and construction of the printer to change the setting of the printer.

CLAIMS:

23. A charging method of a printing system including a server <u>computer</u>, a plurality of client <u>computers</u> connected to said server <u>computer</u> through a network and a printer which is to be used commonly by the plurality of said client <u>computers</u> and notices a status and construction of said printer to said server <u>computer</u>, wherein said server <u>computer</u> executes the steps of storing data of the status and construction of said printer and

noticing a generation of update of the data, acquiring data of the status and construction from said printer and storing the data in said status storing database, storing a name of a printing data producer transferred from said server computer to said printer and values of total print numbers before a transfer of the printing data acquired from said printer and after the printing data is printed by and ejected from said printer in said status storing database, displaying a current status of said printer by acquiring the data of the status and construction from said status storing database and monitoring a generation of update of the data, producing a record of an accumulated number of prints for every name of printing data producer by acquiring the name of the producer of the printing data in transfer and the number of prints of the printing data from said status storing database every transfer of the printing data from said server computer to said printer and transmitting an access to the data of the status and construction in said status storing database from the plurality of said client computers through said network, and

wherein each said client computer executes the steps of copying the stored data of the status and construction in said printer by accessing the stored data and monitoring the stored data of the status and construction and changing the setting of said printer.

| Full | Title | Citation F | ront | Review | Classification | Date | Reference | Selicions | Attachments | Claims | KWIC | Draw | Desc | lma |
|-------|-------|------------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|------|------|---|
| | 33. | Documen | nt ID | : US 6 | 5205434 B1 | | | | | | | | | *************************************** |
| L1: E | Entry | 33 of 5 | 5 | | | | File | : USPT | | | Mar | 20, | 2001 | L |

DOCUMENT-IDENTIFIER: US 6205434 B1

TITLE: Computerized indenture plan allocation determination management and reporting

system

Detailed Description Text (117):

The <u>Computer Program 7</u> is organized about a series of menus which allows the user to enter and delete Excess Account data, as well as to <u>display the account's status and print summary reports</u>. The purpose of this section is to describe in detail the logic which allows the Computer Program 7 to process the data and interact with a user.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequence Machineric | Claims | KWIC | Draw. | Desc | lm |
|------|-------|----------|---------|----------|----------------|------|--------------------------------|---------------------|-------------------|------|-------|------|----|
| | | - | | | | | DANG-OLDAY-RUGA (1 - 10/000-11 | | MIATINA EVANA ANA | | | | |
| | 20.4 | | | A. TICLE | NEED/1 A | | | | | | | | |
| | 34. | Docum | ient IL | D: US 6 | 055361 A | | | | | | | | |

DOCUMENT-IDENTIFIER: US 6055361 A

** See image for <u>Certificate of Correction</u> **
TITLE: Printer control with monitor function

Detailed Description Text (16):

The host computer 10 displays an operation picture plane of the printer or an instructing picture plane to the printer onto a CRT screen 11, sends the printer command or urgent command to the printer in accordance with an instruction of the operator, and executes the process according to an instruction of the operator. The host computer 10 also sends a status inquiry command, obtains information regarding the status of the printer,

displays the necessary information onto the CRT screen, and informs the operator.

Full Title Citation Front Review Classification Date Reference Secuences Attachments Claims KMC Draw. Desc Ima ☐ 35. Document ID: US 6014716 A

L1: Entry 35 of 55

File: USPT

Jan 11, 2000

DOCUMENT-IDENTIFIER: US 6014716 A

TITLE: System for recognizing bidirectional communication over parrallel data lines by further sending data transmission request and notification indicating reverse direction transmission is possible to second device

Detailed Description Text (8):

Further, while the personal computer (PC) 4 and the laser printer 2 exchange handshake signals like strobe signal and acknowledge signal for the handshake procedure with each other over the control lines 10a shown in FIG. 3, data and commands are transmitted from the personal computer (PC) 4 over the data line 10b; according to the result of which the laser printer 2 will perform the printing operation, or if the laser printer 2 can perform in byte mode, which will be described hereafter, it will transmit status data to the personal computer (PC) 4 side. If the personal computer (PC) 4 receives the status data of the laser printer 2 during printing, the printer status will be displayed in the status monitor display field 32a of the display 32.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequera es | Attachmen | ds Claims | KWIC | Draw | Desc | lma |
|-------|-------|----------|--------|---------|----------------|------|-----------|------------|-----------|-----------|------|--------------------------|------|-----|
| | 36. | Docume | ent ID |): US 5 | 5943503 A | | | | | | | Vice-militaria in ancomo | | |
| L1: E | Entry | 36 of ! | 55 | | | | File | : USPT | | | Aud | 24, | 199 | 9 |

DOCUMENT-IDENTIFIER: US 5943503 A

** See image for Certificate of Correction **

TITLE: Status-controlled interrogation of peripheral device status

Brief Summary Text (10):

As mentioned above, the host <u>computer</u> transmits an interrogation command to the printer to demand the status of the printer from the printer, gets the status from the printer, and displays the status information transmitted from the printer on the display unit, by changing the status information to a character, figure and the like.

Detailed Description Text (14):

Furthermore, the host computer performs a function of displaying a status information of printer 2 on CRT 5 on the basis of operating system (OS) and printer status display program (status program) in hard disc 8 via CRT controller 13.

Detailed Description Text (32):

Furthermore, a timer (not shown) is executed by CPU 6 corresponding to a start of the printer status display program. In the case that host computer 1 did not transmit the status interrogation command to printer 2, CPU 6 determines if the initial time (for example, 1.0 seconds) has elapsed since CPU 6 started the printer status display program.

Aug 10, 1999

File: USPT

DOCUMENT-IDENTIFIER: US 5937151 A

TITLE: Method for setting error print output mode

Abstract Text (1):

L1: Entry 37 of 55

An error print output setting method for controlling whether an error message is printed out by a printer when an error occurs. The method includes a step to judge whether the status monitor indicative of the status of a printer is to be displayed on the display of a personal computer in S1080. If the setting indicates that the status monitor is to be displayed on the personal computer, the error print output option is set to "off" in S1100. Therefore, when a printing error occurs, an error message is displayed on the computer display and not printed out by the printer. Thus, excessive waste of paper can be prevented.

Detailed Description Text (56):

Thus, when bidirectional communication is successfully performed between the personal computer 4 and the laser printer 2 ("no" in S4010), the laser printer 2 performs a setting to prevent the execution of error print outputs. The printer 2 stores, in the RAM 16, data indicating that bi-directional communication is possible. The personal computer 4 then receives status signals from the laser printer 2 and displays the printer status on the display 32. Hence, the laser printer 2 sets itself not to execute error print outputs, thereby not wasting printing paper nor preventing a decline in work efficiency.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | serien e | 2 flactories | Claims | KWC | Drawu | Desc | lma |
|-------|-------|----------|--------|--------|----------------|------|-----------|----------|--------------|--------|-----|-------|------|-----|
| | 38. | Docume | ent ID | : US 5 | 930524 A | | | | | | | | | |
| L1: E | Entry | 38 of 5 | 55 | | | | File | : USPT | | | Jul | 27, | 1999 | 9 |

DOCUMENT-IDENTIFIER: US 5930524 A

TITLE: System for selective display of peripheral I/O device status for each application program based on a list of application programs

Brief Summary Text (15):

However, the above-described problems may still possibly occur when a newly-installed application program is executed while the device driver is executed. Further, when the user chooses not to display the status monitor, the <u>printer's status will not be displayed on the computer</u> screen even when only those application programs that currently treat the above-described problems. In this case, the user is not immediately informed when a paper jam occurs or when the printer is out of paper, and can realize that a problem has occurred only after checking the printer directly and finding the job has not been properly performed.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequence: Atlachment | Claims | KWIC | Drawi Desc | ima |
|------|-------|----------|-------|--------|----------------|------|-----------|----------------------|--------|------|------------|-----|
| | | | | | | | | | | | | |

☐ 39. Document ID: US 5706411 A

L1: Entry 39 of 55 File: USPT Jan 6, 1998

DOCUMENT-IDENTIFIER: US 5706411 A

** See image for Certificate of Correction **

TITLE: Printer status user interface and methods relating thereto

Abstract Text (1):

A computer system having a visual display indicating the status of an attached printer is disclosed. The visual display allows the user to determine various status states of the attached printer without physical examination of the printer itself. Printer states requiring user intervention, and printer states not requiring user intervention, are disclosed. In a preferred embodiment, the computer system displays a Printer Status window which both graphically and textually indicates the printer state. When printing, a graphical representation of the attached printer is displayed within a portion of the Printer Status window, and is animated to represent the actual printing of a page. If an error occurs while printing, the Printer Status window preferably indicates the nature of the error, and the steps which must be performed (if any) to continue printing. When not printing, the user may determine the present status of the attached printer, and such information is preferably presented to the user in graphical form. The Printer Status window may be iconized by the user, and the corresponding icon also displays to the user the state of the attached printer.

Brief Summary Text (2):

This invention is generally directed to a user interface for a <u>computer</u> system, and more specifically, to a visual <u>display indicating the status of a printer</u> attached to the <u>computer</u> system.

Detailed Description Text (4):

The <u>Printer Status window is displayed</u> to the user on the visual display of the <u>computer</u> system. Referring to FIG. 1, computer (10), keyboard (12), pointing device (14), visual display (16), visual display screen (18) and attached printer (20) are illustrated. In FIG. 2(a), computer (10), visual display (16) and visual display screen (18) are illustrated in combination with an area (30) of the visual display screen which contains information (not shown) relating to the status of the attached printer. FIG. 2(b) represents a cross-hatched representation of FIG. 2(a), and illustrates the area (30) as it appears on an article of manufacture.

Detailed Description Text (9):

In addition to the Printer Setup dialog box, the visual display of the present invention also displays a Print Manager dialog box to inform the user of the current status of an active printer and printing job. As illustrated in FIG. 4, a preferred embodiment of the Print Manager dialog box is depicted. The Print Manager dialog box contains a button (41), as well as an menu option command to this effect listed under the View command of the Print Manager menu bar, which activates the Printer Status window. The Printer Status window is available when there is bi-directional I/O between the computer system and printer. The Printer Status window appears on the visual display of the computer system when selected by the user as indicated above, or when the user has selected the Automatically Display Printer Status option and the user prints a document, an error occurs, or when user action is required. The Printer Status window preferably disappears (i.e., is not displayed on the visual display) when the user explicitly closes the window, when the print job ends if the user has selected the Automatically Display Printer Status option and the print job ends (and the user has not interacted with the window), the error state ends, or the manual action is performed by the user. The Printer Status window preferably appears as an icon when the user explicitly minimizes the window, the user starts the Printer Status window and the last state of the window was iconized, or the window appears because of the Automatically Display Printer Status option and the last position the user moved the window to was an icon. In addition, the Printer Status window preferably appears full-sized when the user explicitly restores the window, the user selects the Printer Status window and the last position the user placed

the window was full size, an error occurs, or manual action is required.

Detailed Description Text (21):

In a preferred embodiment, a Queue Processor (QP) computer program checks the printer status, displays the Printer Status window (PSW) and dialog boxes, and controls the printing of data. The Queue Processor preferably executes in response to requests from the Windows Print Manager. FIG. 16 is a block diagram illustrating a preferred Queue Processor and a communications driver. The Queue Processor 1600 receives requests to print data, referred to as a "job," and controls the printing of the data and displaying of the Printer Status window. The Queue Processor sends the print data to the communications driver 1604 and receives status information from the communications driver. The communication driver interfaces with the printer through a communications port. The communications driver receives blocks of print data and status requests from the Queue Processor and sends them to the printer over the communications port. In response to these status requests, the communications driver also receives status information from the printer over the communications port and sends it to the Queue Processor. The communications driver also receives, from the printer, signals indicating that the printer's status has changed (the "Status Changed" message) or that the printer has started a page in motion (the "Kick Page" message) which are relayed to the Queue Processor via the Windows PostMessage mechanism.

CLAIMS:

20. A <u>computer</u> readable memory device containing instructions for controlling a <u>computer</u> processor in a <u>computer</u> system to display a printer state of a printer attached to the <u>computer</u> system, the <u>computer</u> system having a <u>display screen and a printer status</u> program by performing the steps of:

under control of the printer status program,

displaying on the display screen an initial printer state;

sending to the attached printer a request for current status;

under control of the attached printer,

receiving the request for current status; and

in response to the received request sending data to the printer status program, the data including information regarding a current printer state; and

under control of the printer status program,

receiving the data sent by the attached printer;

determining an updated printer state based upon the received data; and

displaying the updated printer state on the display screen.

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw Desc Imag

☐ 40. Document ID: US 5699494 A

L1: Entry 40 of 55 File: USPT Dec 16, 1997

DOCUMENT-IDENTIFIER: US 5699494 A

TITLE: Remote replication of printer operator panel

CLAIMS:

1. In a combination including a host computer, a printer and a communication path between the host computer and the printer, the host computer having an associated first display and associated input device, the printer having an operator panel which includes at least one control device and a second display, the improvement, comprising:

a first processing circuit at said host <u>computer</u> and a second processing circuit at said printer, said second processing circuit being configured to <u>display current printer</u> status on said second <u>display</u>;

said first processing circuit being configured to form a replica of the operator panel on the first display and to accept signals from said input device actuated by a first user, said first processing circuit being configured to transmit a first data signal to said second processing circuit via said communication path every time said first user makes an actuation of said input device which results in a change request in the status of said printer;

said second processing circuit being configured to receive said first data signal and to modify said current printer status so as to have the same effect on said printer as would actuation of said at least one control device of said operator panel; and

said second processing circuit being further configured to receive said change request in said printer status made by said first user via said input device at said host computer and to detect an actuation of said at least one control device which results in a change request in said printer status made by a second user via said at least one control device of said operator panel, and to automatically update said second display with said current printer status after operating upon one of said change request by said first user and said second user and to automatically transmit a second data signal containing said current printer status via said communication path to said first processing circuit without a request therefor being issued by said host computer, thereby updating said first display to reflect any changes in said current printer status made by one of said first user and said second user such that said first display and said second display each depict substantially the same information in substantially real time, wherein said at least one control device of said operator panel is configured to allow actuation by said second user to modify said current printer status during the same time interval that said input device of said host computer is being actuated by said first user to modify said current printer status, and neither said at least one control device nor said input device are locked out from being able to modify said current printer status.

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences Attachments Claims | KWIC | Draw Desc | lma |
|------|-------|----------|-------|--------|----------------|------|-----------|------------------------------|------|-----------|-----|
| | | | | | | | | | | | |

☑ 41. Document ID: US 5694618 A

L1: Entry 41 of 55

File: USPT

Dec 2, 1997

DOCUMENT-IDENTIFIER: US 5694618 A

TITLE: Apparatus which transmits a check signal to determine whether a printer is capable of bidirectional data transmission and remotely setting the printer operating environment accordingly

Detailed Description Text (9):

FIG. 5 shows a flowchart representing a utility program followed by the personal computer 3 to check capability of bidirectional transmission between the printer 1 and personal

h eb bgeeef efg ef be

computer 3 and to set printer statuses. This utility program is called a remote printer console. When the personal computer 3 starts the utility program, the program retrieves information on the current printer status from the printer 1 and displays that information on the display 4. The utility program allows an operator to select and change on the display 4 those settings by using the keyboard 5 or the mouse 6.

Full Title Citation Front Review Classification Date Reference Settlesices Atlactinguis Claims KMC Draw Desc Ima 42. Document ID: US 5645359 A

L1: Entry 42 of 55

File: USPT

Jul 8, 1997

DOCUMENT-IDENTIFIER: US 5645359 A TITLE: Bidirectional serial printer

Detailed Description Text (3):

FIG. 1 shows a circuit of the serial printer. The serial printer has a control section 1 for controlling the entire operation thereof. The control section 1 includes a CPU 2 for performing various data processings, a ROM 3 for storing a control program for the CPU 2, bit map fonts for various characters, and the like of fixed data, and a timer TM. The control section 1 is connected to an interface for receiving printing commands such as printing data, paper size data, print format data, and the like supplied from an external device such as a host computer, a display 5 for displaying an operation status of the printer, and a keyboard 6 for entering control instructions. The keyboard 6 has a poweron key, feed key, and on-line key. The printing data is constructed in a text form containing character codes or in a graphic form containing lines of dot data. The character code represents a character, a numeral, a symbol, and the like, and the dot data represents presence or absence of a dot.

Full Title Citation Front Review Classification Date Reference Scillences Attachieries Claims KMC Draw Desc Inse

☐ 43. Document ID: US 5550957 A

L1: Entry 43 of 55

File: USPT

Aug 27, 1996

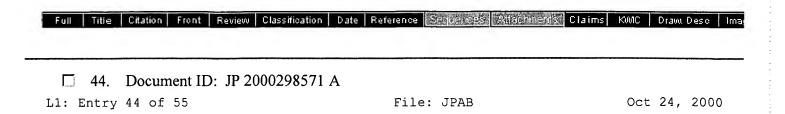
DOCUMENT-IDENTIFIER: US 5550957 A

TITLE: Multiple virtual printer network interface

Detailed Description Text (15):

With reference to FIG. 4, an exemplary host computer 41 is shown connected to a local area network (LAN) and functionally comprising certain software functions relevant to the present invention. The host computer 41 typically includes memory and storage devices such as disk drives (not shown) and associated peripheral devices (not shown) as in typical IBM-compatible personal computers. For the purposes of the present invention, the host computer 41 includes Printer Panel and NPAP code 42, which cooperates with Network Interface code 43, to perform bi-directional communication with printers on a local area network and to display printer status information to a user on a display associated with the host computer 41. The Printer Panel and NPAP code 42 permits a user of the host computer to remotely control printers on an attached local area network and to receive status and fault information from the printers. In the illustrated form, the host computer 41 includes an Intel 80X86microprocessor (80386 or higher) running Microsoft Windows 3.1 and a suitable version of Microsoft DOS for Microsoft Windows 3.1. In this system the Printer Panel and NPAP code 42 runs within the Windows operating environment.

b g ee e f g ef h e b b



DOCUMENT-IDENTIFIER: JP 2000298571 A

TITLE: PRINTING SYSTEM AND CONTROL METHOD OF PRINTING

Abstract Text (2):

SOLUTION: In the printing controlling method, picture data generated by a printer driver 120 in a host <u>computer</u> 100 are stored in a picture data storage means 130, printer status information outputted from a printing status notification means 240 in a printer 200 is read out by a printing state monitoring means 140, and when the information is a data output request, picture data from a <u>page corresponding to the printer status</u> information are outputted by a picture data output means 150. In addition, the deletion or output stop of picture data is executed in accordance with the printer status information.

| Full Titl | le Citation Front Review Classifica | ation Date Reference Section 65 Attachme | do Claims KWAC Draw. Desc Ima |
|-------------|-------------------------------------|--|-------------------------------|
| | | | |
| □ 45 | 5. Document ID: JP 10301728 | 8 A | |
| L1: Enti | rv 45 of 55 | File: JPAB | Nov 13, 1998 |

DOCUMENT-IDENTIFIER: JP 10301728 A

TITLE: INFORMATION PROCESSOR, INFORMATION PROCESSING METHOD AND INFORMATION PROCESSING

SYSTEM

Abstract Text (2):

SOLUTION: A host <u>computer</u> obtains a <u>printer status (S21)</u>, <u>displays</u> an application screen on a CRT(S22), and sets a monitoring interval T as a T1 (S23). Then, after the monitoring interval T(=T1) passes, the printer status is obtained from the printer again (S24 and S25). When this time printer status is different from the previous printer status, the application screen is updated (S26 and S27), and the monitoring time T corresponding to the printer status is set (S28). After network load information is obtained (S29), the status monitoring time T corrected according to the network load is set (S30).

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Seguegosa | Attachments | Claims | KWIC | Drawu | Desc | lma |
|------|---|----------|---------|---|----------------|------|-----------|-----------|-------------|--------|------|-------|------|-----|
| | *************************************** | | ·inter- | *************************************** | | | | | | | | | | • |
| | 46. | Docum | nent II | D: JP 08 | 3002068 A | | | | | | | | | |
| | 1 4 | 46 of | | | | | | le: JPAB | | | _ | _ | 1996 | _ |

DOCUMENT-IDENTIFIER: JP 08002068 A TITLE: PRINTER WITH FACSIMILE

h eb bgeeef efg ef be

Abstract Text (2):

CONSTITUTION: In the case fax receiving demand is received by a facsimile 1 in the middle of printing or making the preparation for printing data from a personal computer 2, the progress time and the set time regarding the status of printing one page are compared by a print recording interface section 8, and provided one page printing can be discontinued before time-out, control for receiving facsimile 1 is performed, while in the case considerable time has already passed after the start of printing, control for giving priority to one page pringing is performed.

Full Title Citation Front Review Classification Date Reference Sequences Attachinents Claims KMC Draw Desc Image 47. Document ID: JP 05265676 A
L1: Entry 47 of 55 File: JPAB Oct 15, 1993

DOCUMENT-IDENTIFIER: JP 05265676 A TITLE: PRINTING MONITORING DEVICE

Abstract Text (1):

PURPOSE: To provide a printing monitoring device capable of monitoring <u>printing status on a display</u> device in a sending side-computer or the like by transferring bit image data obtained at the time of printing to the display device in the sending side-computer or the like and displaying the transferred data on the display device.

| Full Title | Citation Front | Review | Classification | Date | Reference | Sequences | Attachments. | Claims | KWIC | Drawu | Desc | lma |
|------------|----------------|---------|----------------|------|-----------|-----------|--------------|--------|------|-------|------|-----|
| | | | | | | | | | | | | |
| ☐ 48. | Document II | D: WO 9 | 411804 A | 1 | | | | | | | | |
| L1: Entry | 48 of 55 | | | | File | e: EPAB | | | May | 26, | 1994 | 4 |

DOCUMENT-IDENTIFIER: WO 9411804 A1

TITLE: PRINTER STATUS USER INTERFACE AND METHODS RELATING THERETO

Abstract Text (1):

A computer system having a visual display indicating the status of an attached printer is disclosed. The visual display allows the user to determine various status states of the attached printer without physical examination of the printer itself. Printer states requiring user intervention, and printer states not requiring user intervention, are disclosed. In a preferred embodiment, the computer system displays a Printer Status window which both graphically and textually indicates the printer state. When printing, a graphical representation of the attached printer is displayed within a portion of the Printer Status window, and is animated to represent the actual printing of a page. If an error occurs while printing, the Printer Status window preferably indicates the nature of the error, and the steps which must be performed (if any) to continue printing. When not printing, the user may determine the present status of the attached printer, and such information is preferably presented to the user in graphical form. The Printer Status window may be iconized by the user, and the corresponding icon also displays to the user the state of the attached printer.

☐ 49. Document ID: NN8711243

L1: Entry 49 of 55

File: TDBD

Nov 1, 1987

DOCUMENT-IDENTIFIER: NN8711243

TITLE: Display of Printer Status Information for a Typewriter Attached to a Personal

Computer

Disclosure Title (1):

Display of Printer Status Information for a Typewriter Attached to a Personal Computer

Full Title Citation Front Review Classification Date Reference Section 23 (Attachine) Claims KWIC Draw Desc

50. Document ID: JP 2002196896 A

L1: Entry 50 of 55

File: DWPI

Jul 12, 2002

DERWENT-ACC-NO: 2002-603486

DERWENT-WEEK: 200265

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Printing system has monitor which switches status window of client for displaying

status position information, when status window is not ready for reception

Basic Abstract Text (1):

NOVELTY - Client computer (200) and printer (28) are linked to server (201). Client computer seeks status information from server which acquires status from printer and displays same on status window (27) besides transmitting to client. If status window is not ready for reception, monitor (26) switches on status window for status acquisition.

| ar Generate Collection Print Fwd Refs Bkv | vd Refs Generate C |
|---|--------------------|
| ar Generate Collection Print Fwd Refs Bkv | Vulkeis Generate C |
| Term | Documents |
| COMPUTER | 1233693 |
| COMPUTERS | 250905 |
| PRINT\$3 | (|
| PRINT | 561800 |
| PRINTA | 22 |
| PRINTAB | |
| PRINTABI | |
| PRINTABL | |
| PRINTAB1 | |

| PRINTACK | 6 |
|---|----|
| (((PRINT\$3 NEAR1 STATUS\$3) NEAR2 (PAGE\$3 OR DISPLAY\$3)) | 55 |
| WITH COMPUTER).PGPB,USPT,EPAB,JPAB,DWPI,TDBD. | |

There are more results than shown above. Click here to view the entire set.

| Display Format: - | Change Format |
|-------------------|---------------|
|-------------------|---------------|

Previous Page Next Page

Go to Doc#

e

ef

Hit List

Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

Search Results - Record(s) 51 through 55 of 55 returned.

☐ 51. Document ID: JP 2000298571 A

L1: Entry 51 of 55

File: DWPI

Oct 24, 2000

DERWENT-ACC-NO: 2001-384156

DERWENT-WEEK: 200141

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Printing system connected to host <u>computer</u>, has image data output unit to output

image data to printer from a page corresponding to printer status information

Standard Title Terms (1):

PRINT SYSTEM CONNECT HOST <u>COMPUTER</u> IMAGE DATA OUTPUT UNIT OUTPUT IMAGE DATA PRINT <u>PAGE</u> CORRESPOND PRINT STATUS INFORMATION

Full Title Citation Front Review Classification Date Reference Stipping 15 2ttschments Claims KVMC Draw, Desc Imag

52. Document ID: AU 769561 B, WO 200054137 A1, AU 200035219 A, EP 1192529 A1

L1: Entry 52 of 55

File: DWPI

Jan 29, 2004

DERWENT-ACC-NO: 2001-060374

DERWENT-WEEK: 200412

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Printing system has output printing devices connected to network and client computers with administrative link to receive and display features from output devices and status of print jobs sent to printing devices

Basic Abstract Text (2):

DETAILED DESCRIPTION - The printers include a number of features, such as paper input tray information, toner level information, fuser level information, paper output tray information, and printing device service information. Print servers (32a-32n) are located between the network. The servers receive the features from the printing devices and send them through the network to the administrative link. A client print server link (16) on one of the computers (12a-12n) receives and displays the features from the output devices through the network connection, and receives and displays status of each of the print jobs sent to the printing devices from the client computer. An INDEPENDENT CLAIM is also included for process for displaying and controlling the print jobs at one or more of the output devices.

Full Title Citation Front Review Classification Date Reference Section 2. Attachments Claims KMC Draw Desc Ima

□ 53. Document ID: JP 11353075 A

L1: Entry 53 of 55

File: DWPI

Dec 24, 1999

h e b b cg b cc e

Record List Display Page 2 of 3

DERWENT-ACC-NO: 2000-121198

DERWENT-WEEK: 200011

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Printer status display control method for computer network containing several

printers

Standard Title Terms (1):

PRINT STATUS DISPLAY CONTROL METHOD COMPUTER NETWORK CONTAIN PRINT

| Full | Title | Citation | Front | Review | Classification | Date | Reference | EUROSES | Strachments. | Claims | KWIC | Draw. D | esc | lma |
|-------|-------|----------|--------|---------|----------------|------|-----------|---------|--------------|--------|------|---------|------|-----|
| | 54. | Docur | nent I | D: JP 0 | 98339274 A | | | | | | | | | |
| L1: E | Entry | 54 of | 55 | | | | File: | DWPI | | | Dec | 24, | 1996 | , |

DERWENT-ACC-NO: 1997-105122

DERWENT-WEEK: 199710

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Printer status display method for information processor e.g. <u>computer</u> equipped with printer managing and driving functions - involves displaying selected graphical image showing state of printer according to status information stored in memory

Standard Title Terms (1):

PRINT STATUS DISPLAY METHOD INFORMATION PROCESSOR COMPUTER EQUIP PRINT MANAGE DRIVE FUNCTION DISPLAY SELECT GRAPHICAL IMAGE STATE PRINT ACCORD STATUS INFORMATION STORAGE MEMORY

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | er ar in eni | Claims | KWIC | Draw | Desc | lma |
|------|-------|----------|---------|--------|----------------|--------|-----------|-------------|--------------|--------|------|------|------|-----|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 55. | Docum | nent Il | D: WO | 9411804 A | .1, US | S 570641 | 1 A, JP 085 | 503565 W | | | | | |

DERWENT-ACC-NO: 1994-183725

DERWENT-WEEK: 199808

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: <u>Printer status display in computer</u> system - includes visual display indicating status of attached printer, and <u>displays printer status</u> window which both graphically and textural indicates printer state

Basic Abstract Text (1):

The computer system includes a visual display which indicates the status of an attached printer. The visual display allows the user to determine various status states of the printer with physical examination. The <u>computer</u> system <u>displays a printer status</u> window which both graphically and texturally indicates the printer state.

Equivalent Abstract Text (1):

The computer system includes a visual display which indicates the status of an attached printer. The visual display allows the user to determine various status states of the printer with physical examination. The <u>computer</u> system <u>displays a printer status</u> window which both graphically and texturally indicates the printer state.

Standard Title Terms (1):

PRINT STATUS DISPLAY COMPUTER SYSTEM VISUAL DISPLAY INDICATE STATUS ATTACH PRINT DISPLAY PRINT STATUS WINDOW GRAPHICAL TEXTURE INDICATE PRINT STATE

| Term Documents COMPUTER 1233693 COMPUTERS 250905 PRINT\$3 0 PRINT 561800 PRINTA 22 PRINTABI 1 PRINTABL 6 PRINTABI 2 PRINTABI 2 PRINTABI 2 PRINTAC 2 PRINTACK 6 | ar Generate Collection Print Fwd Refs Bkwd Refs | Generate OACS |
|--|---|---------------|
| COMPUTERS 250905 PRINT\$3 0 PRINT 561800 PRINTAB 1 PRINTABI 1 PRINTABL 6 PRINTAB1 2 PRINTAB1 2 PRINTAC 2 | Term | Documents |
| PRINT\$3 0 PRINT 561800 PRINTA 22 PRINTABI 1 PRINTABL 6 PRINTAB1 2 PRINTAC 2 | COMPUTER | 1233693 |
| PRINT 561800 PRINTA 22 PRINTAB 1 PRINTABI 1 PRINTABL 6 PRINTAB1 2 PRINTAC 2 | COMPUTERS | 250905 |
| PRINTA 22 PRINTAB 1 PRINTABI 1 PRINTABL 6 PRINTAB1 2 PRINTAC 2 | PRINT\$3 | 0 |
| PRINTAB PRINTABI PRINTABL 6 PRINTAB1 PRINTAC 2 | PRINT | 561800 |
| PRINTABI 1 PRINTABL 6 PRINTAB1 2 PRINTAC 2 | PRINTA | 22 |
| PRINTABL 6 PRINTAB1 2 PRINTAC 2 | PRINTAB | 1 |
| PRINTAB1 2 PRINTAC 2 | PRINTABI | 1 |
| PRINTAC 2 | PRINTABL | 6 |
| | PRINTAB1 | 2 |
| PRINTACK 6 | PRINTAC | 2 |
| | PRINTACK | 6 |

| Display Format: | - | Change Format |
|-----------------|---|---------------|
| | | |

Previous Page Next Page Go to Doc#